EARLY INNATE IMMUNE RESPONSES TO VACCINATIONS AS PREDICTORS OF PROTECTION

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Fresh whole blood from vaccinated donors

Density gradient centrifugation

Plasma

Multiplex Cytokine/chemokine ELISA

IgM, IgG, IgA ELISA

Day 1-7
Innate Immunity (type I IFNs, IP10)

Week 3 and beyond
Th1 Adaptive Immunity (IFNγ, TNFα, MCP-1)
Fresh whole blood from vaccinated donors

Density gradient centrifugation

PBMCs

Ficoll density separation

Aurora Spectral Flow Cytometry

Staining for lineage and activation markers (25+)

Analysis of immune cell populations

Gating for immune cell populations

Day 1-7

INNATE IMMUNITY
(Myeloid cell function)

Week 3 and beyond

ADAPTIVE IMMUNITY
(B and T cell responses)

Additive Properties of Fluorophore Spectra

CYTOKINE PROFILES IN PLASMA EARLY AFTER VACCINATION AS MARKERS FOR PROTECTIVE ADAPTIVE IMMUNE RESPONSES (Type I IFNs, IP10)